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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/071,231	02/11/2002	Roger Elgner	6052-117/HRH	9241
1059	7590	12/19/2003	EXAMINER	
BERESKIN AND PARR SCOTIA PLAZA 40 KING STREET WEST-SUITE 4000 BOX 401 TORONTO, ON M5H 3Y2 CANADA			DAVIS, ROBERT B	
			ART UNIT	PAPER NUMBER
			1722	

DATE MAILED: 12/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/071,231	Applicant(s) ELGNER ET AL.	
	Examiner Robert B. Davis	Art Unit 1722	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6/11/03.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because it is more than one paragraph and more than 150 words. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Brannagan (656,505: figures 1-4 and page 1, lines 54-73).

Brannagan teaches a mold for blow molding comprising: a first mold fixture (3a) and a second mold fixture (3), each of the mold fixtures having first and second cavity parts to define blow molding cavity, the first mold fixture (3a) having a driving means (6, 6a and 8), which is a pin (6) having a locking tang (6a shown in the locked position in figures 1 and 4) and a handle (8) for moving the locking tang into the locked position, and the second mold (3) having a receiving means (5c) for receiving the pin (6) with the tang in the unlocked position. The reference also teaches placing a parison in the mold before it is closed and blowing the parison in the mold after closing and locking the mold.

4. Claims 1 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese reference (9-225999: figures 1-3 and abstract).

The Japanese reference teaches a blow mold comprising: a first mold (2) having a locking means (7) and a second mold (1) having a receiving means (8), such that upon closing of the molds having a blow molding cavity (9,10) the locking means is driven to receiving means (8) to lock the mold parts together without using a press. It is clear that a parison will be blown in the mold after assembling and locking.

5. Claims 1 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by European reference (0050227: figures 1-12).

The European reference teaches first and second blow molds (5, 4), the first mold (5) having a driving means (13) for a wedge (12) and the second mold having a receiving means (10) such that the wedge is driven into the receiving means upon the closing of the molds to lock the molds in place during blowing of a parison (3). It is clear that the parison (3) will be blown in the mold after closed and locked as shown in figure 2.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over either German reference (199 22 684 A1: figures 1 and 2) or Dohmen (6,416,313: figures 1-2 and column 4, lines 1-5 and 21-49) taken together with Nakagawa (4,362,688: figures 4-7B) and either the Japanese reference or the European reference.

The German reference and Dohmen disclose a process of feeding a parison from a co-extrusion head to a lower mold (4), lowering an upper mold (3) onto the lower mold and wherein locking cylinders (13) become engaged with locking bars (14) to provide the necessary locking force. The examiner considers the locking force to be caused by relative movement between the bar and the cylinder, but such is not explicitly stated and a secondary reference will be applied to show motive means for manipulating a locking mechanism. These references do not disclose grasping the lower mold with a robot or the presealing during closing. These primary references are equivalents.

Nakagawa discloses a method of extrusion blow molding wherein a parison (27) is extruded from an extruder (21) into a lower mold (23a-figure 5b) wherein the lower mold is moved by a robot (32) to allow the tubular parison to be placed into a curved mold. It is considered inherent that the parison, which lies on the parting face of the mold as shown in figure 5b is presealed during closing of the mold as required by the blow molding process.

Each of the Japanese reference and the European reference shows a blow mold locking means to comprise a driving member and a receiving member as discussed supra.

It would have been obvious at the time of the invention to one of ordinary skill in the art to modify the apparatus of either of the primary references by using a robot to manipulate a lower mold to allow an extrudate to be fed to a mold as disclosed by Nakagawa for the purpose of feeding a tubular parison into a curved mold cavity.

It would have been further obvious at the time of the invention to one of ordinary skill in the art to modify either of the primary reference by using a locking means which included a driving member and a receiving member as disclosed by either the Japanese reference or the European reference for the purpose of ensuring locking of the molds after closing.

9. Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over either the German reference or Dohmen taken together with Nakagawa and either the Japanese reference or the European reference as applied to claims 13-15 above, and further in view of Yamamura et al (5,264,178: figures 4 and 5).

The combination of the references used in paragraph 8 disclose all claimed features except for the use of a combination of upper and lower molds wherein the upper molds are the same and the lower molds are the same.

Yamamura et al disclose an extrusion blow molding machine, which comprises a single extruder that feeds two different mold assemblies by means of movable lower

molds (11 and 21) that are shuttled between a central parison receiving position (mold 11 in figure 4) and a molding position (mold 21 in figure 4).

It would have been obvious at the time of the invention to one of ordinary skill in the art to modify the apparatus of either primary reference by using a pair of upper and lower molds to form molded articles in two different molds as disclosed by Yamamura et al to increase the output of the molding machine by allowing one parison to be blown into a molded article while a second parison is extruded.

10. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over German reference or Dohmen taken together with Nakagawa and either the Japanese reference or the European reference and Yamamura et al as applied to claims 16 and 17 above, and further in view of Nielsen (6,113,841: figure 1 and column 2, lines 41-59).

The combination of references used in paragraph 10 discloses all claimed features except for the use of different molds having different shapes.

Nielsen discloses a blow molding process including using a single extruder (31) to feed different molds (17, 21) to allow for process runs that would be uneconomical to make a limited amount of one article to be run simultaneously with another article formed in a different mold.

It would have been obvious at the time of the invention to one of ordinary skill in the art to modify the combination of references used in paragraph 9 by modifying the shape of one of the molds in relation to the other mold(s) as disclosed by Nielsen for the purpose of allowing limited product process runs to be completed in an economical manner.

11. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over either German reference (199 22 684 A1: figures 1 and 2) or Dohmen (6,416,313: figures 1-2 and column 4, lines 1-5 and 21-49) taken together with European reference.

The German reference and Dohmen disclose a device comprising an extruder for feeding a parison from a co-extrusion head to a lower mold (4), lowering an upper mold (3) onto the lower mold and wherein locking cylinders (13) become engaged with locking bars (14) to provide the necessary locking force. The examiner considers the locking force to be caused by relative movement between the bar and the cylinder, but such is not explicitly stated and a secondary reference will be applied to show motive means for manipulating a locking mechanism. These primary references are equivalents. Please note that the lower mold has a recess for receiving a protruding portion of the upper mold as shown in figure 1 on the left side of the mold.

The European reference shows a blow mold locking means to comprise a driving member and a receiving member as discussed supra. The reference shows 4 camming members (112) in figure 8 and a pin and receiving means in figures 9-11.

It would have been obvious at the time of the invention to one of ordinary skill in the art to modify either of the primary reference by using a locking means which included a driving member and a receiving member as disclosed by either the European reference for the purpose of ensuring locking of the molds after closing.

12. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over either the German reference or Dohmen taken together with the European reference as applied to claims 1-9 above, and further in view of Nakagawa.

The combination of the references used in paragraph 11 does not disclose grasping the lower mold with a robot or the presealing during closing.

Nakagawa discloses an extrusion blow molding machine wherein a parison (27) is extruded from an extruder (21) into a lower mold (23a-figure 5b) wherein the lower mold is moved by a robot (32) to allow the tubular parison to be placed into a curved mold.

It would have been obvious at the time of the invention to one of ordinary skill in the art to modify the apparatus of either of the primary references by using a robot to manipulate a lower mold to allow an extrudate to be fed to a mold as disclosed by Nakagawa for the purpose of feeding a tubular parison into a curved mold cavity.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The remaining references show the state of the related art.

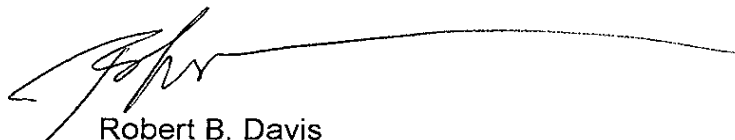
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert B. Davis whose telephone number is 571-272-1129. The examiner can normally be reached on Monday-Friday 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda L. Walker can be reached on 571-272-1151. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

A handwritten signature in black ink, appearing to read 'R. B. Davis', with a long horizontal line extending to the right.

Robert B. Davis
Primary Examiner
Art Unit 1722

12/12/02